

N36-136495 M/TH

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The following is a complete listing of all claims in the application, with an indication of the status of each:

Listing of claims:

1. (currently amended) A polarizing filter having a laminate structure,
comprising:
a first group of dielectric thin film materials;
a second group of dielectric thin film materials; and
a third layer of dielectric thin film material,
wherein a plurality of dielectric materials different from one another in
refractive index with respect to a wavelength of incident light are classified
into said first group and said second group so that a maximum value among
the refractive indices of the dielectric materials belonging to said first group is
lower than a minimum value among the refractive indices of the dielectric
materials belonging to said second group;
wherein at least one layer of dielectric thin film selected from the
dielectric materials belonging to said first group and at least one layer of
dielectric thin film selected from the dielectric materials belonging to said
second group are alternately laminated to form said laminate structure, said
laminate structure being mounted on a transparent flat substrate beginning
with a first layer adjacent to said transparent flat substrate;
wherein said third layer of dielectric thin film has a refractive index
which is higher than the maximum value selected from said refractive indices
of the dielectric materials belonging to said first group and which is lower
than the minimum value selected from said refractive indices of the dielectric
materials belonging to said second group and is laminated on an outermost

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23 surface of said laminate structure, said laminate structure being between said
24 third layer and said transparent flat substrate;
25 wherein said first layer includes the dielectric thin film selected from
26 the dielectric materials belonging to said second group; and
27 wherein said polarizing filter polarizes non-polarized light into
28 polarized light having an s-polarized light component and a p-polarized light
29 component, the transmittance ratio of the s-polarized light component to the p-
30 polarized light component being in the range of 0.2 to 1.0, said transmittance
31 ratio of said polarizing filter being controllable to obtain a desired intensity
32 ratio of the s-polarized light component to the p-polarized light component of
33 said non-polarized light.

1 2. (canceled)

1 3. (previously presented) A polarizing filter according to Claim 1, wherein
2 one to four layers of dielectric thin films selected from said first group and one
3 to four layers of dielectric thin films selected from said second group are
4 laminated alternately on said transparent flat substrate.

1 4. (currently amended) A polarizing filter according to Claim 1, wherein a
2 refractive index difference with respect to ~~the~~^a wavelength of incident light
3 between adjacent dielectric thin films selected from the dielectric materials
4 belonging to said first and second groups respectively is in a range of from
5 0.15 to 1.2, both inclusively.

1 5. (previously presented) A polarizing filter according to Claim 1, wherein
2 optical film thickness of each of said dielectric thin films is in a range of
3 $0.25\lambda \pm 0.15\lambda$ in which λ is a wavelength of incident light.

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1 6. (previously presented) An optical device using a polarizing filter defined
2 in Claim 1, wherein an angle of incidence on said polarizing filter is in a range
3 of from 20 to 70 degrees.

1 7-8. (canceled)

1 9. (previously presented) A polarizing filter according to claim 1, wherein a
2 total number of layers of dielectric thin film is at least three layers and not
3 larger than seven layers.

1 10. (previously presented) A polarizing filter according to claim 1, wherein
2 the refractive index of said layer on an outermost surface is 1.62.

1 11. (currently amended) A polarizing filter according to claim 1, wherein
2 said ~~layers are~~ polarizing filter is constructed by three layers, the refractive
3 index of the first layer is 2.13, the refractive index of the second layer is 1.46,
4 and the refractive index of the layer on an outermost surface is 1.62.

1 12. (previously presented) A polarizing filter according to claim 1, wherein
2 said layers are constructed by three layers, the refractive index of the first layer
3 is 2.13, the refractive index of the second layer is 1.40, and the refractive
4 index of said layer on an outermost surface is 1.46.

1 13. (currently amended) A polarizing filter according to claim 1, wherein
2 said ~~at least three layers are~~ polarizing filter is constructed by seven layers, the
3 refractive indexes of the first to sixth layers are 2.13, 1.46, 2.13, 1.46, 2.13

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4 and 1.46, respectively, and the refractive index of said layer on an outermost
5 surface is 1.62.

1 14. (currently amended) A polarizing filter according to claim 1, wherein
2 said ~~at least three layers are~~ polarizing filter is constructed by five layers, the
3 refractive indexes of the first to fourth layers are 2.13, 1.46, 2.13 and 1.46,
4 respectively, and the refractive index of said layer on an outermost surface is
5 1.62.

1 15-22. (canceled)